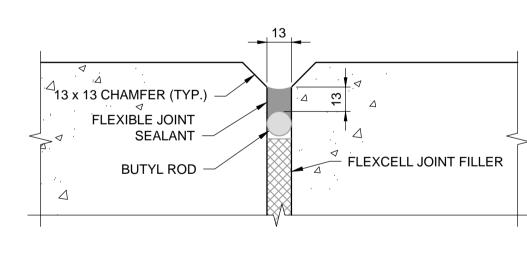


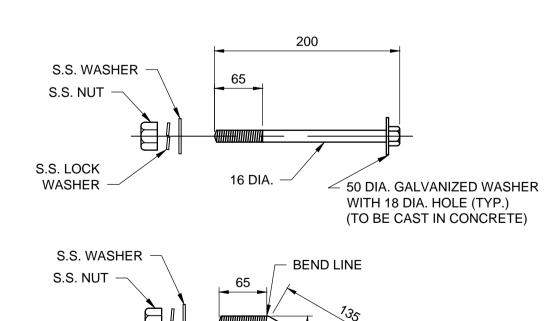
BARRIER REPAIR TYPE 1



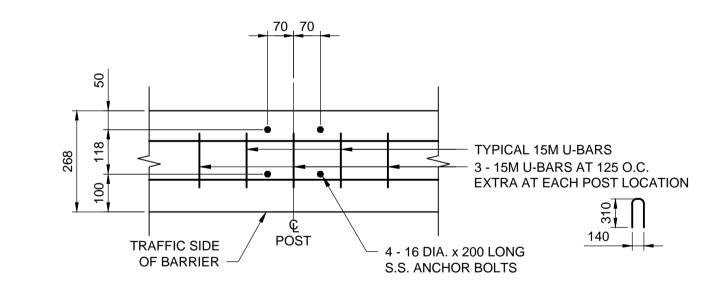
CONCRETE BARRIER JOINT REPAIR

- 1. DIMENSIONS SHOWN OF EXISTING BARRIERS ARE
- APPROXIMATE. DIMENSIONS SHOWN OF REPAIR AREAS ARE APPROXIMATE. LAYOUT ACTUAL REPAIR AREAS WITH CONTRACT
- ADMINISTRATOR ON SITE. 3. SEE SPECIFICATION FOR REPAIR PREPARATION & CONCRETE
- REPLACEMENT DETAILS. SHOULDER BARRIER SHOWN, MEDIAN BARRIER ARE SIMILAR.
- REPLACE FLEXIBLE JOINT SEALANT WHERE REQUIRED BY
- CONCRETE REPAIR.

S.S. LOCK WASHER

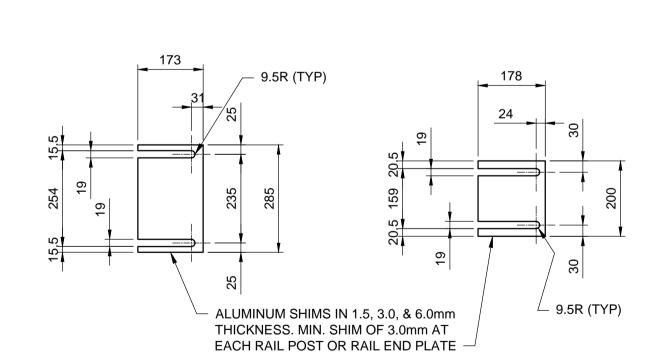


S.S. ANCHOR BOLT ASSEMBLY



PROPOSED

TRAFFIC BARRIER RAIL POST ANCHOR BOLT LAYOUT



SHIM PLATE DETAIL

BARRIER REPAIR METHOD (TYPE 1)

3. PLACE NEW REINFORCING AS SHOWN.

BARRIER REPAIR METHOD (TYPE 2)

5. APPLY BONDING AGENT TO SURFACES IN CONTACT WITH REPAIR CONCRETE.

1. MIN. 20mm SAWCUT AROUND PERIMETER OF

2. REMOVE ALL FRACTURED OR DETERIORATED

2.3. IF REMOVALS EXCEED HALF DEPTH OF

20mm PAST REINFORCING BARS.

4. CLEAN CONCRETE REPAIR AREA AS SPECIFIED.

REINFORCING BARS, THEN CONTINUE MIN.

EMBEDMENT.

REPAIR AREA.

CONCRETE TO: 2.1. SOUND CONCRETE; 2.2. MIN. 30mm DEEP, AND

5. PLACE REPAIR MATERIAL.

6. PLACE REPAIR CONCRETE.

1. SAWCUT AND REMOVE AFFECTED PORTION OF

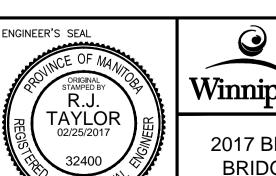
2. INSTALL 15M U-BAR DOWELS WITH MIN. 200mm

4. PLACE NEW BARRIER RAIL POST ANCHOR BOLTS.

- 1. A COMBINATION OF 1.5, 3.0, AND/ OR 6.0mm THICK ALUMINUM RAIL POST OR END PLATE SHIMS ARE TO BE USED AS REQUIRED TO SET THE BARRIER RAIL TO THE SPECIFIED HEIGHT. (MINIMUM 3.0mm SHIM REQUIRED AT EACH POST OR
- PLATE.) 2. BOTTOM SURFACE OF SHIM (SURFACE IN CONTACT WITH CONCRETE) IS TO BE PAINTED WITH TWO COATS OF ALKALI RESISTANCE BITUMINOUS PAINT, EACH COAT BEING 1mm IN THICKNESS.

APEGM Certificate of Authorization Dillon Consulting Limited (MB) No. 1789 Date: February 25, 2017

	B.M. ELE				DESIGNED BY	DRA	11.	ENGINEER'S SEAL
ŀ					DRAWN BY	КВ		ORIGINAL STAMPED BY R.J.
ŀ					CHECKED BY	SSR	DILLON	TAYLOR 02/25/2017 32400 PROFESSION
ŀ					APPROVED BY HOR. SCALE	RJT	CONSULTING	
ŀ						_	RELEASED FOR CONSTRUCTION	
t	0	ISSUED FOR TENDER	02/25/17	RJT	VERTICAL			CONSULTANT PROJECT NUMBER
	NO.	REVISIONS	DATE	BY	DATE FEBRUARY 24, 2017		DATE	17-5199



THE CITY OF WINNIPEG Winnipeg

PUBLIC WORKS DEPARTMENT CITY DRAWING NUMBER

2017 BRIDGE MAINTENANCE - MIDTOWN BRIDGE & ST. VITAL BRIDGE REPAIRS

B116-17-02 13 ^{OF} 17

CONSULTANT DRAWING NUMBER

METRIC WHOLE NUMBERS INDICATE MILLIMETRES DECIMALIZED NUMBERS INDICATE METRES

ST. VITAL BARRIER REPAIR DETAILS